

January 4, 2000

27-18172.001



Ms. Linda Kern
USEPA Region 5
77 West Jackson Boulevard, SR-6J
Chicago, IL 60604

RE: Old Mill Superfund Site
Rock Creek, Ohio

Dear Ms. Kern:

We have enclosed for your review a copy of the revised Present Worth Cost Analysis for Long-Term Operation and Maintenance (O & M) at the Old Mill Superfund Site. This document has been revised in response to comments presented by the USEPA in your letter dated December 13, 1999 and subsequent telephone conversations between us. As we discussed and agreed, use of a 7 percent interest rate and a 24-year evaluation period are appropriate and, therefore, no revisions have been made to this document to address those comments. However, revisions have been made to address the comments regarding equipment replacement and site care.

Please give me a call if you have any questions or wish to discuss the enclosed revised document. In the meantime, I will await your approval.

Sincerely,

Brown and Caldwell

A handwritten signature in black ink, appearing to read "Dale R. Showers".

Dale R. Showers, P.E., CHMM
Project Manager
Design & Solid Waste

cc: Mike Eberle/Ohio EPA
Frank Biros/US Department of Justice
Susan Kroeger/Ohio Attorney General Office
Jerry Muys, Esq./Swidler Berlin Shereff Friedman, LLP
Bill Coughlin, Esq./Calfee, Halter & Griswold
John Sullivan, Esq./Baker & Hostetler

**PREPARED FOR SETTLEMENT PURPOSES ONLY
NOT ADMISSIBLE UNDER FEDERAL RULE OF EVIDENCE 408**

**PRESENT WORTH COST ANALYSIS FOR
LONG-TERM OPERATION AND
MAINTENANCE AT THE OLD MILL
SUPERFUND SITE
ROCK CREEK, OHIO**

Prepared for:

The Old Mill PRP Group

Prepared by:

**BROWN AND CALDWELL
227 French Landing Drive
Nashville, Tennessee 37228
(615) 255-2288**

January 2000

18172

**PRESENT WORTH COST ANALYSIS FOR
LONG-TERM OPERATION AND MAINTENANCE
AT THE OLD MILL SUPERFUND SITE
ROCK CREEK, OHIO**

The Old Mill PRP Defense Group requested that Brown and Caldwell (BC) perform a present worth cost analysis for estimated future costs associated with long-term operation and maintenance (O&M) of the groundwater collection and treatment system at the site. BC has completed this analysis and the results are summarized in this document. This document also reflects responses to comments received from the USEPA in a letter dated December 13, 1999 and subsequent telephone conversations with the USEPA.

The present worth analysis includes several cost components, as summarized on the attached Table 1. The monitoring and reporting costs are based upon the program outlined in the amended Statement of Work transmitted to the USEPA on December 17, 1999. Other cost components are based on previous cost analyses which, in turn, were based on cost information obtained from Weston and the USEPA. As such, the cost estimates used in this present worth analysis represent existing cost information, where applicable, and do not represent bid amounts for continued O&M.

The cost components include an on-site operator, office support for the operator, and operating and maintenance costs. BC has evaluated the O&M duties of the on-site operator and we have talked to the current operator about these duties. Based upon the information we have obtained and our evaluation, BC does not believe that a full-time operator is necessary to effectively perform O&M duties at the site. Thus, for the purposes of this present worth cost analysis, we have assumed a part-time operator (50 percent) would be sufficient for proper operation and maintenance of the site. It is possible that after a period of time, the time spent on site could be reduced below about 20 hours per week; however, due to the uncertainty, we have not included that possibility in this cost analysis.

The cost analysis presented in this document includes costs for the sampling and analysis program outlined in the December 1999 Statement of Work, including the proposed additional monitoring wells. This represents a reduction in the historical analytical costs for the site. Please note that the monitoring costs do not include a contingency for an expanded monitoring well network if it is

determined that the groundwater plume expands beyond that currently anticipated. Similarly, the monitoring costs do not consider the potential for reducing the analytical parameter list or sampling frequency in the future. We have also assumed a reduced level of effort for the reporting requirements.

The last component of the cost analysis sets forth a reserve for potential abandonment of the structures associated with the collection and treatment system. We have assumed that the existing monitoring wells and piezometers will be abandoned, the groundwater collection sumps will be abandoned, the trench drains will remain in place, and the treatment building will be decommissioned. The cost for these activities is assumed to be a one-time expense, which will occur at the end of the 25-year O&M term.

In estimating the present worth of annual costs, the time frame assumed for the duration of O&M activities is January 1, 2000 to January 1, 2024 (24 years). In addition, a 7 percent rate of return was assumed for the present worth calculation for annual costs. The year 2023 was estimated by Weston at which time the collection and treatment system could be shut down (refer to the Seventh Annual Performance Evaluation Report prepared by Weston, April 1998). However, as part of long-term O&M, collected data will be evaluated as appropriate and it is possible that the system could be shut down sooner. The interest rate selected for this analysis is based upon USEPA OSWER Directive 9355.3-20, which recommends the use of 7 percent. Please note that this present worth analysis assumes a single annual disbursement rather than the actual "continuous" disbursement throughout any given year. This impact to the present worth estimate is minimal.

TABLE 1
PRESENT WORTH COST ANALYSIS FOR
LONG-TERM OPERATION AND MAINTENANCE
OLD MILL SUPERFUND SITE
ROCK CREEK, OHIO

CONFIDENTIAL SETTLEMENT DOCUMENT
 UNDER FEDERAL RULE OF EVIDENCE 408

ITEM DESCRIPTION	COST ESTIMATE
Capital Costs	
Work Plan Preparation ¹	\$20,000
Transition Period	\$10,000
Installation of Additional Wells and/or Piezometers	\$15,000
Subtotal	\$45,000
GAC Column, Air Stripper Replacements ³	\$75,000
	\$75,000
Abandonment/Decommissioning ⁴	\$150,000
Annual Costs	
Operator	\$65,000
Groundwater Monitoring	\$20,000
Treatment System Monitoring	\$6,000
Reporting/Office Support	\$35,000
Operation Costs	\$22,000
Maintenance Costs	\$4,000
Subtotal ²	\$152,000
Present Worth	\$1,875,356

¹ The Work Plan components include:

- Health and Safety Plan
- Sampling and Analysis Plan
- Field Sampling Plan
- Quality Assurance Project Plan
- Data Management Plan
- Contingency Plan

² Present Worth Factor for Annual Expenditures = 11.469 at 7 % for 24 years.

³ Present Worth Factor for Future Expenditures = 0.5083 and 0.2584 for 10 and 20 years, respectively, at 7 %.

⁴ Present Worth Factor for Future Expenditures = 0.1971 at 7 % for 24 years.